

ABSTRACT OF THE DISCLOSURE

The invention provides a method of treating vulnerable plaque at a site in a vessel. A vulnerable plaque site is identified for treatment. A radiation source is introduced into a vessel containing a vulnerable plaque site identified for treatment. The radiation source is guided to a position adjacent to the treatment site. A therapeutically effective dose of radiation is delivered to the vulnerable plaque site. As the radiation impinges upon the wall of the lumen, it promotes cell growth. Such growth can serve to strengthen the thin fibrous cap found atop a vulnerable plaque lesion. With the lesion thus stabilized, time is provided for the use of statin drugs or other agents to shrink or remove the lipid pool beneath the cap.